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| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>   |  | ATTORNEY'S DOCKET NUMBER<br><b>112701-667</b>  |
| INTERNATIONAL APPLICATION NO.<br><b>PCT/EP04/06805</b>  |  | INTERNATIONAL FILING DATE<br><b>06/18/2004</b> |
|   |  | PRIORITY DATE CLAIMED<br><b>06/20/2003</b>     |
| TITLE OF INVENTION<br><b>MODULATION OF COFFEE FLAVOUR PRECURSOR LEVELS IN GREEN COFFEE GRAINS</b>   |  |  |
| APPLICANT(S) FOR DO/EO/US<br><b>McCarthy et al.</b>   |  |  |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:   |  |  |
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> |  |  |
| <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> </ol>  |  |  |

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|  |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
|--|---|---|--------------------------|-----------|--|--|--------------|--------------|------------------------------|---|-------|----|------------------------------|-----------------------------------|--|--|---|--|-----|----|---------------------------|--|-------|--|------------------------------|------------------------------|--|--|--|--|-----|----|--|--|-------|--|---|--|-------|--|---------------------------|--|-------|--|---------------------------------|--|--|--|--|---|--|--|--|--|--------------|--------------|---|------|--|---------|-------|--|---------|--|---|--|-----------|--|--|--------|--------------|--------------|------|--|--------------|--------|--|---------|----|--------------------|-------|--|---------|----|---|--|--|---------|----|--------------------------------------|--|--|--|--|--|--|--|--|--|-------------------|--|--|--|--|---|--|---|--|--|-----------------------------|--|--|--|--|--|--|---|--|--|------------------------------|--|--|--|--|--|--|--|------------------------|----|--------------|--|--|----------------------|-----------|
| U.S. APPLICATION NO. (if known, see 37 CFR 1.5)  |   | INTERNATIONAL APPLICATION NO.   | ATTORNEY'S DOCKET NUMBER |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <p>20. Other items or information:</p> <p>copy of Notification of Missing Requirements; cd of sequence listing (1); return receipt postcard</p> <table border="1"> <tr> <td colspan="2">The following fees have been submitted</td> <td>CALCULATIONS</td> <td>PTO USE ONLY</td> </tr> <tr> <td>21. <input type="checkbox"/></td> <td>Basic national fee (37 CFR 1.492(a)).....</td> <td>\$300</td> <td>\$</td> </tr> <tr> <td>22. <input type="checkbox"/></td> <td>Examination fee (37 CFR 1.492(c))</td> <td></td> <td></td> </tr> <tr> <td colspan="2">If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....</td> <td>\$0</td> <td>\$</td> </tr> <tr> <td colspan="2">All other situations.....</td> <td>\$200</td> <td></td> </tr> <tr> <td>23. <input type="checkbox"/></td> <td>Search fee (37 CFR 1.492(b))</td> <td></td> <td></td> </tr> <tr> <td colspan="2">If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....</td> <td>\$0</td> <td>\$</td> </tr> <tr> <td colspan="2">Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....</td> <td>\$100</td> <td></td> </tr> <tr> <td colspan="2">International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....</td> <td>\$400</td> <td></td> </tr> <tr> <td colspan="2">All other situations.....</td> <td>\$500</td> <td></td> </tr> <tr> <td colspan="5"><b>TOTAL OF 21, 22 and 23 =</b></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br/>The fee is \$250 for each additional 50 sheets of paper or fraction thereof.</td> <td colspan="3"></td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td>Number of each additional 50 or fraction thereof (round up to a whole number)</td> <td colspan="2">RATE</td> </tr> <tr> <td>- 100 =</td> <td>/50 =</td> <td></td> <td colspan="2">x \$250</td> </tr> <tr> <td colspan="2">Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> <td colspan="2">\$ 130.00</td> <td></td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td colspan="2">RATE</td> </tr> <tr> <td>Total claims</td> <td>- 20 =</td> <td></td> <td>x \$ 50</td> <td>\$</td> </tr> <tr> <td>Independent claims</td> <td>- 3 =</td> <td></td> <td>x \$200</td> <td>\$</td> </tr> <tr> <td colspan="2">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td></td> <td>+ \$360</td> <td>\$</td> </tr> <tr> <td colspan="5"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> </tr> <tr> <td colspan="5"><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.</td> </tr> <tr> <td colspan="5"><b>SUBTOTAL =</b></td> </tr> <tr> <td colspan="2">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).</td> <td colspan="3">+</td> </tr> <tr> <td colspan="5"><b>TOTAL NATIONAL FEE =</b></td> </tr> <tr> <td colspan="2">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property</td> <td colspan="3">+</td> </tr> <tr> <td colspan="5"><b>TOTAL FEES ENCLOSED =</b></td> </tr> <tr> <td colspan="3">09/13/2006 GFREY1 00000131 021010 10559986</td> <td>Amount to be refunded:</td> <td>\$</td> </tr> <tr> <td colspan="3">01 130.00 DA</td> <td>Amount to be charged</td> <td>\$ 130.00</td> </tr> </table> |   |   |                          |           | The following fees have been submitted |  | CALCULATIONS | PTO USE ONLY | 21. <input type="checkbox"/> | Basic national fee (37 CFR 1.492(a))..... | \$300 | \$ | 22. <input type="checkbox"/> | Examination fee (37 CFR 1.492(c)) |  |  | If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... |  | \$0 | \$ | All other situations..... |  | \$200 |  | 23. <input type="checkbox"/> | Search fee (37 CFR 1.492(b)) |  |  | If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... |  | \$0 | \$ | Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... |  | \$100 |  | International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... |  | \$400 |  | All other situations..... |  | \$500 |  | <b>TOTAL OF 21, 22 and 23 =</b> |  |  |  |  | <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br>The fee is \$250 for each additional 50 sheets of paper or fraction thereof. |  |  |  |  | Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE |  | - 100 = | /50 = |  | x \$250 |  | Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). |  | \$ 130.00 |  |  | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE |  | Total claims | - 20 = |  | x \$ 50 | \$ | Independent claims | - 3 = |  | x \$200 | \$ | MULTIPLE DEPENDENT CLAIM(S) (if applicable) |  |  | + \$360 | \$ | <b>TOTAL OF ABOVE CALCULATIONS =</b> |  |  |  |  | <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. |  |  |  |  | <b>SUBTOTAL =</b> |  |  |  |  | Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). |  | + |  |  | <b>TOTAL NATIONAL FEE =</b> |  |  |  |  | Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property |  | + |  |  | <b>TOTAL FEES ENCLOSED =</b> |  |  |  |  | 09/13/2006 GFREY1 00000131 021010 10559986 |  |  | Amount to be refunded: | \$ | 01 130.00 DA |  |  | Amount to be charged | \$ 130.00 |
| The following fees have been submitted   |   | CALCULATIONS  | PTO USE ONLY             |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| 21. <input type="checkbox"/>   | Basic national fee (37 CFR 1.492(a))..... | \$300   | \$                       |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| 22. <input type="checkbox"/>   | Examination fee (37 CFR 1.492(c))         |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....  |   | \$0   | \$                       |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| All other situations.....  |   | \$200   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| 23. <input type="checkbox"/>   | Search fee (37 CFR 1.492(b))              |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....   |   | \$0   | \$                       |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....   |   | \$100   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....  |   | \$400   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| All other situations.....  |   | \$500   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <b>TOTAL OF 21, 22 and 23 =</b>  |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br>The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Total Sheets   | Extra Sheets                              | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE                     |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| - 100 =  | /50 =                                     |   | x \$250                  |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).  |   | \$ 130.00   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| CLAIMS   | NUMBER FILED                              | NUMBER EXTRA  | RATE                     |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Total claims   | - 20 =                                    |   | x \$ 50                  | \$        |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Independent claims   | - 3 =                                     |   | x \$200                  | \$        |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)  |   |   | + \$360                  | \$        |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.   |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <b>SUBTOTAL =</b>  |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  |   | +   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <b>TOTAL NATIONAL FEE =</b>  |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property   |   | +   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| <b>TOTAL FEES ENCLOSED =</b>   |   |   |                          |           |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| 09/13/2006 GFREY1 00000131 021010 10559986   |   |   | Amount to be refunded:   | \$        |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |
| 01 130.00 DA   |   |   | Amount to be charged     | \$ 130.00 |  |  |              |              |                              |   |       |    |                              |                                   |  |  |   |  |     |    |                           |  |       |  |                              |                              |  |  |  |  |     |    |  |  |       |  |   |  |       |  |                           |  |       |  |                                 |  |  |  |  |   |  |  |  |  |              |              |   |      |  |         |       |  |         |  |   |  |           |  |  |        |              |              |      |  |              |        |  |         |    |                    |       |  |         |    |   |  |  |         |    |                                      |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |   |  |   |  |  |                             |  |  |  |  |  |  |   |  |  |                              |  |  |  |  |  |  |  |                        |    |              |  |  |                      |           |

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- a.  A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b.  Please charge my Deposit Account No. 02-1818 in the amount of \$ 130.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c.  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-1818. A duplicate copy of this sheet is enclosed.
- d.  Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

  
\_\_\_\_\_  
SIGNATURERobert M. Barrett  
\_\_\_\_\_  
NAME30,142  
\_\_\_\_\_  
REGISTRATION NUMBER



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|-----------------------------|-----------------------|-------------------------------|
| U.S. APPLICATION NUMBER NO. | FIRST NAMED APPLICANT | ATTY. DOCKET NO.              |
| 10/559,986                  | James McCarthy        | 112701-667                    |
|                             |                       | INTERNATIONAL APPLICATION NO. |
|                             |                       | PCT/EP04/06805                |
| I.A. FILING DATE            |                       | PRIORITY DATE                 |
| 06/18/2004                  |                       | 06/20/2003                    |
| CONFIRMATION NO. 6606       |                       |                               |
| 371 FORMALITIES LETTER      |                       |                               |
| <br>*OC000000018463877*     |                       |                               |

Date Mailed: 04/06/2006

**NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 12/08/2005
- Copy of the International Search Report filed on 12/08/2005
- Copy of IPE Report filed on 12/08/2005
- Preliminary Amendments filed on 12/08/2005
- Oath or Declaration filed on 12/08/2005
- Biochemical Sequence Listing filed on 12/08/2005
- U.S. Basic National Fees filed on 12/08/2005
- Substitute Specification filed on 12/08/2005
- Priority Documents filed on 12/08/2005
- Power of Attorney filed on 12/08/2005

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**INTELLECTUAL PROPERTY DOCKET**

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 ATTY: RMB/MYB  
 DOCKET #: 112701-667

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
  - is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

**SUMMARY OF FEES DUE:**

Total additional fees required for this application is \$130 for a Large Entity:

- **\$130 Surcharge.**

- This application does not contain a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). Applicant must provide such statement. If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

**For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:**

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

SHAKEEL AHMED

---

Telephone: (703) 308-9140 EXT 208

**PART 1 - ATTORNEY/APPLICANT COPY**

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| U.S. APPLICATION NUMBER NO. | INTERNATIONAL APPLICATION NO. | ATTY. DOCKET NO. |
|-----------------------------|-------------------------------|------------------|
| 10/559,986                  | PCT/EP04/06805                | 112701-667       |

FORM PCT/DO/EO/905 (371 Formalities Notice)

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| Application Number<br>Filing Date<br>First Named Inventor<br>Art Unit<br>Examiner Name | 10/559,986<br>December 8, 2005<br>McCarthy et al.<br>Unknown<br>Unknown |
| Total Number of Pages in This Submission   | Attorney Docket Number<br><br>112701-667                                |

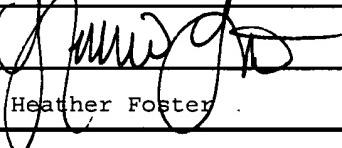
| ENCLOSURES (Check all that apply)   |  |  |
|---|--|--|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53<br>X Reply to Missing Requirements | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><br><input checked="" type="checkbox"/> CD, Number of CD(s) <u>1</u><br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>Transmittal Letter (duplicate)<br>Copy of Notification of Requirements; return receipt postcard<br>Sequence Listing on cd<br>Petition for Extension of Time |
| <b>Remarks</b><br>A sequence listing on cd is included in this submission<br>The Commissioner is hereby authorized charged the amount of<br><b>\$1150</b> : to for submitting the declaration and any other<br>additional charges included in this submission<br>to deposit account no. 02-1818   |  |  |

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|              |  |          |        |
|--------------|--|----------|--------|
| Firm Name    | Customer No. 29157   |          |        |
| Signature    |  |          |        |
| Printed name | Robert M. Barrett  |          |        |
| Date         | September 6, 2006  | Reg. No. | 30,142 |

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

|                       |   |      |            |
|-----------------------|---|------|------------|
| Signature             |  |      |            |
| Typed or printed name | Heather Foster  | Date | 09/06/2006 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.